

## Plant Profile

### *Bambusa moreheadiana* F.M. Bailey (Magnoliophyta: Poaceae)

More than a century ago Carron (1852) noted the presence of a climbing bamboo in North Queensland and Mueller (1886), commenting upon the record, regarded the collector's notes and specimens as inadequate to name the species. Three years later Bailey (1889) mindful of the economic potential of bamboos and noting the irregularity in flowering of the group decided to describe the plant as a species of *Bambusa*. He used the term in the sense of a form genus (Greuter *et al.* 1988) as employed by palaeobotanists stating that "when flowers and fruits are obtained the species can then be placed in the tribe and genus to which it may prove to belong". The subsequent descriptions and references to the species by Bailey (1890, 1902, 1913) add nothing to the original description.

Although Dr S.T. Blake collected flowering specimens of *Bambusa moreheadiana* in 1941, pressure of war duties caused them to be put aside and not until months before his death in 1973 did he consider describing the material. At that time he gave an inflorescence to the author for dissection but ill health caused study of the material to be postponed until now more than 50 years after its collection and a century and a half after it was studied by Carron (1852).

***Bambusa moreheadiana* F.M. Bailey**, Botany of the Bellenden Ker Expedition. Notes and Proceedings of the Legislative Assembly of Queensland Session 1889, IV p.26. **Type:** Queensland, COOK DISTRICT, Russell River, Harvey's Creek, July/August 1888 *F.M. Bailey* (holo: BRI).

Scandent, vine-like bamboo. Culms hollow to 3 cm in diameter and internodes up to 30 cm long inflated with abundant stiff antrorse hairs, at length deciduous leaving bare culms. Nodes marked by scar of fallen leaf and bearing a

single rhombus-shaped bud covered by a prophyll with shortly ciliate keels.

Branching usually solitary but sometimes multiple due to development of lower buds on extending axis. Foliage leaves evenly spaced with shortly overlapping sheaths, blades variable in size, green on both surfaces, lanceolate up to 30 cm long and 3 cm wide, contracting abruptly basally to a short pseudopetiole and distally gradually to an acuminate apex, midvein conspicuous on lower surface, glabrous on both surfaces, deciduous; sheath shortly hairy when young, lacking auricles or auriculate setae on either side of pseudopetiole; ligule stiffly membranous, obtuse, 3 mm long. Inflorescence leafless with spikelets in sessile tufts separated by long internodes. Pseudospikelets 5–6 mm long with short rachilla internodes and bearing 3–4 florets; glumes not distinct from lemmas, 7-nerved; palea strongly dorsally compressed, with long hairs on the keels; lodicules if present small and fimbriate, stamens four with flattened filaments and projecting barbellate connectives, one or more anthers aborted resulting in staminodes; pistil with a single flattened style bearing short antrorse hairs and divided distally into 2–3 short stigmas; fruit unknown. **Fig. 1.**

**Specimens examined:** Queensland. COOK DISTRICT: Russell River, Harveys Creek, 17°01'S, 145°05'E Jul-Aug 1888, *F.M. Bailey* BRI (AQ 318904); Forest Reserve 755, Parish of Palmerston, 17°31'S, 145°52'E, Sep 1986, *B. Gray* 4336 (BRI); between Innisfail and East Palmerston, 17°03'S, 145° 05'E, Nov 1941, *S.T. Blake* 14412, (BRI); Eubenangee via Innisfail, 17°02'S, 145°-E, Jun 1980, *V.K. Moriarty* 336 (BRI); Warraker Creek Rd, NW of Innisfail, 17°32'S, 145°55'E, Nov 1991, *A.R. Bean*, 3800 (BRI); State Forest Reserve 755 Badgery, 17°31'S, 145°52'E, Sep 1986, *B. Gray* 20232 RFV, (BRI); Cooper Creek, Cape Tribulation Rd, 16°00'S, 145°02'E, Jul 1980, *K.A. Williams* 80139 (BRI); S.F.R. 755 Barang L.A., 17°31'S, 145°51'E, Sep 1976, *D. Fitzsimon* (QRS 045826); T.R. 55, 16°20'S, 145°20'E, Apr 1974, *A.K. Irvine*, (QRS 0458235, .24, .25); 17°40'S, 145°40'E, Jul 1971, *B. Hyland* (QRS 045822); Harvey Creek, 17°16'S, 145°55'E, Apr 1947, *H. Flecker* (QRS 045821).

**Distribution and habitat:** The species is restricted to poorly drained areas below 200 m

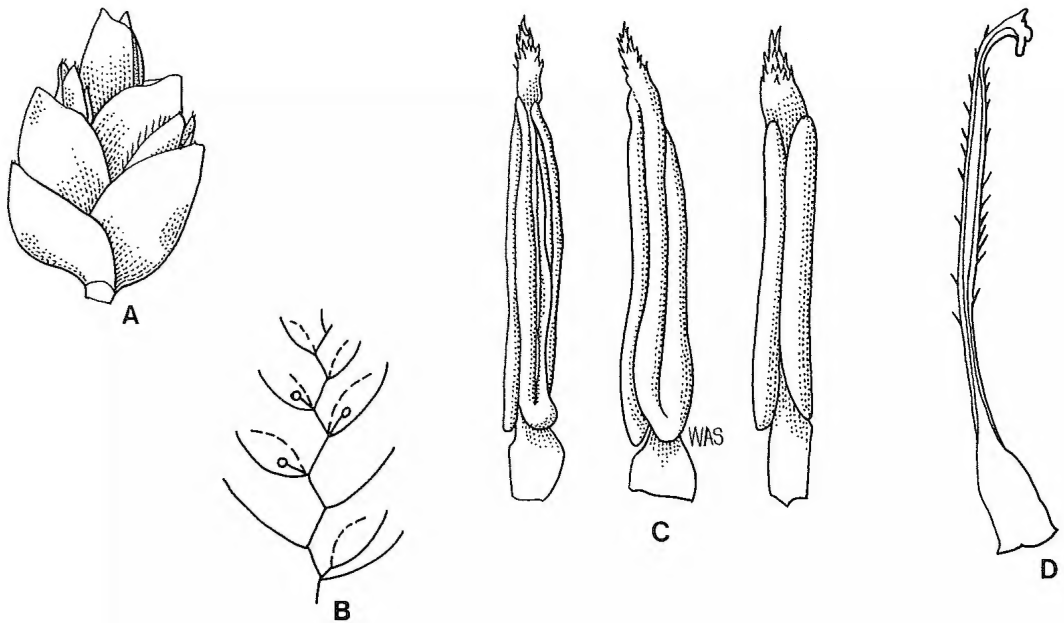


Fig. 1. *Bambusa moreheadiana*: A. single pseudospikelet  $\times 6$ . B. diagram of pseudospikelet with paleae represented by interrupted lines and glumes and lemmas by continuous lines. C. stamens  $\times 25$ . D. pistil  $\times 25$ . From S.T. Blake 14412.

seaward of the Main Range between Innisfail and Cape Tribulation in north-east Queensland. It occurs principally on the margins of closed-forest, climbing to the tops of tall trees from which its branches may cascade downwards for many metres.

**Conservation status:** The species is in no way threatened for several of the sites at which it grows are in National Parks, which are included within the area listed for World Heritage.

**Notes:** Other than possessing four instead of six stamens the flowers of *Bambusa moreheadiana* are typical of those of *Bambusa* as circumscribed by Holttum (1967) and so the species may be regarded as correctly placed in that genus. This viewpoint is further supported by the structure of the pseudospikelets and the inflorescence which also agree with those of *Bambusa*. Variation in stamen number is not unusual for grass flowers (Clifford 1961) and so should be accorded only little weight in defining genera.

Nevertheless although the pistil resembles that of *Bambusa* the fruit is unknown and is required to confirm the generic status of the taxon.

During the past century the species has flowered at least twice in the Innisfail District, the type locality. Flowering material was collected by S.T. Blake in November 1941 and by B. Gray in September 1986. These specimens suggest the species flowers in spring and so fruiting specimens should be sought in the late spring or early summer.

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